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{In Archive} cross-hole hydraulic tests at Powerex David A Eckhardt

Isabel Rodrigues, Robert Alvey, jm, JD, Don Bussey, John H Williams 06/11/2008 03:29 PM

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Just to give everyone an update about the cross-hole hydraulic tests that OBG did at the Powerex site last Thursday June 5-

A pressure slug of 18 ft (about 7.8 psi pressure) was applied at B-32-D3. After a 30-minute equilibration period, the pressure was instaneously released and water levels were observed in adjacent monitor wells B-31-D3, B-33-D3, EPA-01-D3, and EPA-02-D3. No response was observed in any of the monitor wells, although the data in the tested well yielded a recovery curve that can provide a good estimate of transmissivity.

A second test was then conducted with 23.8 ft (about 10.3 psi) at B-32-D3. Again, no response was observed.

## Conclusions-

- 1. Well spacings are too far apart for this cross-hole approach.
- 2. The sand packs around the screens in the Powerex wells will dampen the pressure-slug transmission.
- 3. In future tests, using small inflatable packers to shut in the pressure recorders in the Powerex wells and using Westbay monitor ports rather than the open boreholes may better represent the confined aguifer conditions at the wells, which may improve potential response.
- 4. Use of larger pressure slugs could be possible, although it may not be practical due to safety and mechanical issues.

## --Dave

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